## Nuclear power gets a lift from unusual allies

By MICHAEL JANOFSKY Bloomberg News

The move to slow global warming is helping Texas utilities push construction of the next generation of nuclear power plants, 30 years after environmentalists stalled the first of them.

Over the next decade, Texas may become the biggest U.S. builder of nuclear generating plants. NRG Energy, Energy Future Holdings Corp., Exelon Corp. and a new utility in Amarillo have proposed eight reactors, a quarter of the planned U.S. total, according to the Nuclear Regulatory Commission.

The industry is taking advantage of new state and federal incentives and is bolstered by a new set of allies: A generation of environmental activists inspired by Al Gore's Oscarwinning documentary, *An Inconvenient Truth*, and growing concerns about climate change. Patrick Moore, 60, a founder of the global conservationist group Greenpeace, is a leading backer.

"Public opinion has clearly shifted," says Moore, who is a paid spokesman for the nuclear industry-funded Clean and Safe Energy Coalition. He contends that atomic power is a cleaner alternative to coal-fired electric plants, which produce greenhouse gases linked to global warming. "The stigma of nuclear power in North America has largely dissipated."

Even organizations such as the Natural Resources Defense Council and Environmental Defense say nuclear power would be acceptable if solutions are found for the risks that have impeded its development for years: disposal of waste, security against terrorist attack and misuse of radioactive material for arms.

For his part, Gore "is not reflexively anti-nuclear," Kalee Kreider, a spokeswoman, said last week in an e-mailed response to questions. Gore believes that nuclear generators won't be "a major solution," citing reservations that include what to do with spent fuel, nuclear proliferation and the large size of reactors, she said.

The Texas generators would be part of a global nuclear construction surge. While countries such as China and Russia need energy for expanding economies, developed countries are being asked to lower production of gases that contribute to global warming. Delegates from 187 countries agreed at a United Nations conference in Bali on a framework for two years of negotiations on reducing the emissions.

Through October, 439 reactors were operating in 30 countries, including 104 in the U.S., according to the World Nuclear Association, based in London. An additional 316 were under consideration in 24 countries that have nuclear energy and in 10 that don't. The new reactors would almost double today's atomic-plant output of 372,000 megawatts, 18 percent of the world's electricity.

Nuclear power in Texas still has skeptics, who recall the 1979 radiation leak at the Three Mile Island generating plant in Pennsylvania, the cinematic near-meltdown the same year in the Jane Fonda film, *The China Syndrome*, and the real meltdown at Chernobyl in Ukraine in 1986.

"The problem we see is people using global warming as an excuse to do nuclear power while ignoring the need to address the other issues," says Ken Kramer, Texas director of the environmentalist Sierra Club.

Tom Smith, the Texas director of Public Citizen, a national consumer-advocacy group, helped force safety upgrades that delayed the opening of four reactors by more than a decade in the 1970s. Smith still sees safety threats in nuclear plants and vows to oppose new construction, advocating wind and solar power and conservation as better alternatives.

"We're fighting on a second front that we didn't have the first time," he says, recalling late nights sending faxes and arguing against atomic plants on FM radio. "Within the environmental community, there's a great deal of confusion about whether nuclear power should be an option."

In Texas, opposition to the proposals is barely above a whisper. With mounting energy needs, a surging population and persistent air pollution in North Texas and Houston, the state is doing all it can to attract nuclear development.

Texas ranks first in producing and consuming energy, according to the U.S. Energy Department. Its population will grow 45 percent to 33.3 million by 2030, according to the Census Bureau. Houston and Dallas have failed to meet federal clean air standards for five years, the Environmental Protection Agency says.

With coal-fired power plants losing favor because of their greenhouse-gas emissions, Texas electricity suppliers are looking for cleaner sources, including wind and solar. Environmentalists forced the cancellation of plans for eight coal-fired plants before they would support the \$45 billion February acquisition of TXU Corp., the state's biggest electricity producer, by the investment groups Kohlberg Kravis Roberts & Co. of New York and TPG Inc. of Fort Worth.

Although nuclear reactors may cost as much as \$6 billion each, they are more reliable than wind or solar energy. The total cost of electricity is comparable to coal and wind, according to the Energy Department: 5.4 cents for one kilowatt-hour from coal, 6.8 cents from wind, and 5.9 cents from atomic power. Solar electricity costs 25.5 cents

Congress set up tax credits and loan guarantees in 2005 to encourage building of nuclear plants. Texas enacted three measures this year creating additional incentives, including reduced local property taxes and state guarantees for decommissioning and decontaminating nuclear plants when they close. A third law creates a tax exemption for pollution-control devices, which lawmakers say may include nuclear plants.

The central issue for investors is "regulatory certainty," Gov. Rick Perry said.

"Companies invest when they are assured that the rules will not change midstream," Perry said in an e-mailed response to questions.

Moore, the Greenpeace founder, met with academics, business leaders and utility company executives last week in Austin.

"We're gradually ramping up the efforts," Moore said. "Texas is a key state, a can-do state, and what it decides to do gets done."

In September, Princeton, N.J.-based NRG became the first company to seek a license to expand its nuclear-generating complex southwest of Houston. NRG's South Texas Nuclear Generating Station is one of two atomic sites operating in the state.

The other is the Comanche Peak Nuclear Generating Station southwest of Fort Worth, operated by Energy Future Holdings, formerly TXU. Energy Future Holdings proposes to expand Comanche Peak by two units.

Both lumbered to life in the face of community and environmentalist opposition. South Texas came online in 1988, 12 years after construction began. Although work on Comanche Peak started in 1974, it didn't open for more than 15 years after an NRC probe found more than 100 potential safety violations.

In 2006, the two plants supplied 10.3 percent of the power on the Texas grid, according to the Energy Department. Natural gas accounted for 50.4 percent, the most of any state, and coal, 37 percent.

Exelon of Warrenville, Ill., the biggest U.S. operator of nuclear generating plants with 10, is considering two sites in Texas. One would be near the NRG complex and the second, farther inland.

A fourth project has been proposed near Amarillo. George Chapman, a local cattleman and real estate developer, notified the NRC in March of his plans. His partner in the new entity, Amarillo Power Llc., is Constellation Energy Group of Baltimore.

State Rep. Phil King, R-Weatherford, who led the push in the Capitol for pro-nuclear legislation, says he expects all four of the projects to proceed.

"This is the best place in the United States to get them done," King says. "The first one to break ground with an operating permit and finances opens the door for a lot of others."

Public Citizen's Smith, now 57, says he is "re-energizing the old troops" to fight the new projects, although "they're mainly old, bald men now."